## RIVERS AND FLOODS FOR JUNE, 1913.

By Alfred J. Henry, Professor in Charge River and Flood Division.

The annual rise in the Columbia River and its tributaries was in progress during the month, a full statement of which appears in the report of the district editor.

The moderate flood that was in progress in the Illinois River at the end of May had receded by the middle of the month. In South Carolina, the Santee River was slightly above flood stage from the 13th to the 15th, and the Rio Grande at San Marcial, N. Mex., crested at 13 feet, 2 feet above flood stage, on the 13th. Elsewhere the rivers were at moderate stages during the month.

Losses in bridges, railroads, public highways, and costs of cleaning cellars during May, 1913, amounting to about

\$50,000, have been reported from Duluth, Minn., and Superior, Wis., resulting from heavy storms in the early morning of the 29th at those points.

Hydrographs for typical points on several principal rivers are shown on Chart I. The stations selected for charting are Keokuk, St. Louis, Memphis, Vicksburg, and New Orleans, on the Mississippi; Cincinnati and Cairo, on the Ohio; Nashville, on the Cumberland; Johnsonville, on the Tennessee; Kansas City, on the Missouri; Little Rock, on the Arkansas; and Shreveport, on the Red.